

SYSTEM AND METHOD  
FOR PROGRAMMING NETWORK NODES

ABSTRACT OF THE DISCLOSURE

A system and method programs network nodes of a packet-based network to provide services. A service creation tool provides an interface for defining packet processing behaviors in a domain specific programming language and package the service for deployment to the network. A service control center deploys, provisions and monitors the service on programmable nodes. Network processors associated with the programmable nodes have packet processing behaviors translated from the programming language to operation code with a network processor abstraction layer. The service control center and network nodes use a three layer architecture to represent service, execution environment and infrastructure functionality.